BEHAVIOR GENETICS

Vol. 32, No. 1 January 2002

CONTENTS

Including Measured Genotypes in Statistical Models to Study the Interplay of Multiple Factors Affecting Complex Traits 1
Edwin J. C. G. van den Oord and Harold Snieder

Power and Sample Sizes for Linkage with Extreme Sampling Under an Oligogenic Model for Quantitative Traits 23
Moonseong Heo, Myles S. Faith, and David B. Allison

The Mixed or Multilevel Model for Behavior Genetic Analysis 37
Guang Guo and Jianmin Wang

Genome Scanning of the HXB/BXH Sets of Recombinant Inbred Strains of the Rat for Quantitative Trait Loci Associated with Conditioned Taste Aversion 51
Edita Bielavská, Vladimir Křen, Alena Musilová, Václav Zídek, and Michal Pravenec

Mapping of QTL Influencing Saccharin Consumption in the Selectively Bred Alcohol-Preferring and -Nonpreferring Rat Lines 57
T. Foroud, P. Bice, P. Castelluccio, R. Bo, A. Ritchotte, R. Stewart, L. Lumeng, T.-K. Li, and L. Carr

Two QTLs Located on Chromosomes 1 and 5 Modulate Different Aspects of the Performance of Mice of the B × D Ty Ri Strain Series in the Morris Navigation Task 69
J.-M. Milhaud, H. Halley, and J. M. Lassalle

Factor Analysis of Olfactory Responses in *Drosophila melanogaster* Enhancer-Trap Lines as a Method for Ascertaining Common Reception Components for Different Odorants 79
Fernando Martin, Min-Su Kim, Bernard Hovemann, and Esther Alcorta

BEHAVIOR GENETICS

Vol. 32, No. 2 March 2002

CONTENTS

Effects of Tyrosine Hydroxylase Mutants on Locomotor Activity in *Drosophila:* A Study in Functional Genomics 89
Robert G. Pendleton, Aseel Rasheed, Thomas Sardina, Tim Tully, and Ralph Hillman

Confirmation of QTL Effects and Evidence of Genetic Dominance of Honeybee Defensive Behavior: Results of Colony and Individual Behavioral Assays 95
Ernesto Guzmán-Novoa, Greg J. Hunt, José L. Uribe, Christine Smith, and Miguel E. Arechavaleta-Velasco

SRY Does Not Fully Sex-Reverse Female into Male Behavior Towards Pups 103
Ingrid Reisert, Magdelena Karolczak, Cordian Beyer, Walter Just, Stephen C. Maxson, and Günter Ehret

Anxiety in the Elevated Zero-Maze Is Augmented in Mice after Repeated Daily Exposure 113
Melloni N. Cook, Martha Crounse, and Lorraine Flaherty

Extracellular Superoxide Dismutase Overexpression Protects Against Aging-Induced Cognitive Impairment in Mice 119
Edward D. Levin, N. Channelle Christopher, Sohail Lateef, Belal M. Elamir, Manisha Patel, Li-Ping Liang, and James D. Crapo

Differences Between Two Psychogenetically Selected Lines of Rats in a Swimming Pool Matching-To-Place Task: Long-Term Effects of Infantile Stimulation 127
Raúl Aguilar, Rosa M. Escorihuela, Luis Gil, Adolf Tobeña, and Alberto Fernández-Teruel

Power and Efficiency of the TDT and Case-Control Design for Association Scans 135
Ralph McGinnis, Sagiv Shifman, and Ariel Darvasi

A Limited Dependant Variable Model for Heritability Estimation with Non-Random Ascertained Samples 145
Timo M. Bechger, Dorret I. Boomsma, and Henk Koning

Exploratory Factor Analysis in Behavior Genetics Research: Factor Recovery with Small Sample Sizes 153
Kristopher J. Preacher and Robert C. MacCallum

BEHAVIOR GENETICS

Vol. 32, No. 3 May 2002

CONTENTS

Genetic Analysis of Low-Dose Ethanol-Induced Activation (LDA) in Inbred Long Sleep (ILS) and Inbred Short Sleep (ISS) Mice 163
Jeremy C. Owens, Michael C. Stallings, and Thomas E. Johnson

Sexual Differences for Emigration Behavior in Natural Populations of *Drosophila melanogaster* 173
Konstantin G. Iliadi, Natalia N. Iliadi, Eugenia L. Rashkovetsky, Svetlana V. Girin, Eviatar Nevo, and Abraham B. Korol

Differential Genetic Etiology of Reading Component Processes as a Function of IQ 181
Valerie S. Knopik, Shelley D. Smith, Lon Cardon, Bruce Pennington, Javier Gayan, Richard K. Olson, and John C. DeFries

Application of Hierarchical Genetic Models to Raven and WAIS subtests: A Dutch Twin Study 199
Frühling V. Rijsdijk, P. A. Vernon, and Dorret I. Boomsma

Estimation of Sib-Pair IBD Sharing and Multipoint Polymorphism Information Content by Linear Regression 211
Frühling V. Rijsdijk and Pak C. Sham

Evaluation of Analyses of Univariate Discrete Twin Data 221
Patrick F. Sullivan and Lindon J. Eaves

BEHAVIOR GENETICS

Vol. 32, No. 4 July 2002

CONTENTS

Contribution of Genetic Polymorphisms in Ethanol-Metabolizing Enzymes to Problem Drinking Behavior in Middle-Aged Japanese Men 229
Fang Sun, Ikiko Tsuritani, and Yuichi Yamada

Genetic and Environmental Influences on the Development of Intelligence 237
M. Bartels, M. J. H. Rietveld, G. C. M. Van Baal, and D. I. Boomsma

The Heritability of Gender Identity Disorder in a Child and Adolescent Twin Sample 251
Frederick L. Coolidge, Linda L. Thede, and Susan E. Young

Prenatal Cocaine Exposure Alters Maternal Retrieval Behavior in Mice 259
Christopher W. Hess, Martin E. Hahn, Robert H. Benno, and Norman Schanz

Brief Communication
The Effects of Cold, Rotation, and Genotype on the Production of Ultrasonic Calls in Infant Mice 267
Martin E. Hahn and Norman Schanz

BEHAVIOR GENETICS

Vol. 32, No. 5 September 2002

CONTENTS

Special Issue: Selective Breeding Programs with Rats
Guest Editors: F. Robert Brush and Peter Driscoll

Selective Breeding Programs with Rats: Introduction 275
F. Robert Brush and Peter Driscoll

The Maudsley Reactive and Nonreactive Strains: A New Perspective 277
David A. Blizard and Nelson Adams

High vs Low Anxiety-Related Behavior Rats: An Animal Model of Extremes in Trait Anxiety 301
Rainer Landgraf and Alexandra Wigger

The Naples High- and Low-Excitability Rats: Selective Breeding, Behavioral Profile, Morphometry, and Molecular Biology of the Mesocortical Dopamine System 315
Davide Viggiano, Daniela Vallone, Hans Welzl, and Adololfo G. Sadile

Behavioral Characteristics of Rat Lines Selected for Differential Hypothermic Responses to Cholinergic or Serotonergic Agonists 335
David H. Overstreet

Apomorphine Susceptibility and Animal Models for Psychopathology: Genes and Environment 349
Bart A. Ellenbroek and Alexander R. Cools

Phenotypic and Genotypic Characterization of the Indiana University Rat Lines Selectively Bred for High and Low Alcohol Preference 363
James L. Murphy, Robert B. Stewart, Richard L. Bell, Nancy E. Badia-Elder, Lucinda G. Carr, William J. McBride, Lawrence Lumeng, and Ting-Kai Li

BEHAVIOR GENETICS

Vol. 32, No. 6 November 2002

CONTENTS

A Pilot Twin Study of Psychological Measures of Attention Deficit Hyperactivity Disorder 389
Jane Holmes, Tracey Hever, Lisa Hewitt, Claire Ball, Eric Taylor, Katia Rubia, and Anita Thapar

Chromosal Fragility in a Behavioral Disorder 397
Isabel Arrieta, Teresa Nuñez, Begoña Martínez, Arantza Pérez, Mercedes Télez, Begoña Criado, Itziar Gainza, and Carlos M. Lostao

Overexpression of a *CREB* Repressor Isoform Enhances the Female Sexual Receptivity in *Drosophila* 413
Takaomi Sakai and Yoshiaki Kidokoro

QTL Analysis of a Red Junglefowl x White Leghorn Intercross Reveals Trade-Off in Resource Allocation Between Behavior and Production Traits 423
Karin Schütz, Susanne Kerje, Örjan Carlborg, Lina Jacobsson, Leif Andersson, and Per Jensen

Food Intake, Water Intake, and Drinking Spout Side Preference of 28 Mouse Strains 435
Alexander A. Bachmanov, Danielle R. Reed, Gary K. Beauchamp, and Michael G. Tordoff

Voluntary Consumption of NaCl, KCl, $CaCl_2$, and NH_4Cl Solutions by 28 Mouse Strains 445
Alexander A. Bachmanov, Gary K. Beauchamp, and Michael G. Tordoff

Behavior Genetics Association Meeting Abstracts 459

Minutes of the 32nd Annual Behavior Genetics Association Business Meeting 491

Awards Presented at the 32nd Annual Meeting of the Behavior Genetics Association 495

Announcement: Fulker Award for a Paper Published in *Behavior Genetics, Volume 31* 497

Announcement: The Sixteenth International Workshop on Methodology of Twin and Family Studies: The Advanced Course 499

Referees for Volume 32 501

Author Index for Volume 32 503

Subject Index for Volume 32 509